

[12604/17]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s) : Thomas LEICHTER et al.
Serial No. : 10/556,222
Filed : November 9, 2005
For : COMPACT DRIVE
Examiner : Ha Dinh HO
Art Unit : 3681
Confirmation No. : 3690

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office via the Office electronic filing system on September 17, 2008.

Signature: /  /

2nd REPLY UNDER 37 C.F.R. § 1.116

S I R:

In response to the Advisory Action of August 4, 2008 and the Final Office Action of May 12, 2008, kindly amend the above-captioned application without prejudice as follows:

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 17. (Canceled).

18. (Previously Presented) A compact drive, comprising:
an electric motor;
a transmission;
a frequency converter; and
a housing including at least one housing part and at least one housing cover;
wherein an output shaft of the transmission and a rotor shaft of the electric motor are arranged in parallel, a shaft-center distance determined in accordance with at least one transmission stage;

wherein the frequency converter is arranged laterally in a direction orthogonal with respect to the rotor shaft; and

wherein the two sides of the output shaft are accessible to provide a two-sided power take-off.

19. (Previously Presented) The compact drive according to claim 18, wherein the at least one transmission stage includes a spur-gear transmission stage.

20. (Previously Presented) The compact drive according to claim 18, wherein the at least one transmission stage includes a variable transmission.

21. (Previously Presented) The compact drive according to claim 18, wherein the at least one transmission stage includes one of (a) a continuously variable, wide-belt transmission and (b) a chain drive.

22. (Previously Presented) The compact drive according to claim 18, wherein the electric motor includes at least one of (a) a synchronous motor and (b) a permanent-magnet motor.

Claim 23. (Canceled).

24. (Previously Presented) The compact drive according to claim 18, wherein a transmission region of the compact drive is sealed with respect to the environment, with respect to a region of the electric motor and with respect to an electronics compartment.

25. (Previously Presented) The compact drive according to claim 18, wherein a transmission region of the compact drive, a region of the electric motor and an electronics compartment are at approximately a same temperature level.

26. (Previously Presented) The compact drive according to claim 18, wherein the electric motor includes a sensor.

27. (Previously Presented) The compact drive according to claim 18, wherein the electric motor includes a sensor including a resolver stator and a resolver rotor.

28. (Previously Presented) The compact drive according to claim 18, wherein the rotor shaft and at least one shaft of the transmission are supported in a same housing part.

29. (Previously Presented) The compact drive according to claim 18, wherein the rotor shaft includes a single shaft-sealing ring.

30. (Previously Presented) The compact drive according to claim 18, wherein the output shaft includes three shaft-sealing rings.

Claim 31. (Canceled).

32. (Previously Presented) The compact drive according to claim 18, further comprising a housing including two housing parts and one housing cover.

33. (Previously Presented) The compact drive according to claim 18, further comprising electrical connection terminals for load leads arranged on a housing part of the compact drive.

34. (Previously Presented) The compact drive according to claim 33, further comprising at least one electronic circuit adapted to at least one of (a) modulate and (b) demodulate information onto the load leads.

35. (Previously Presented) The compact drive according to claim 18, further comprising a housing including at least one region having peaks and depressions adapted to at least one of (a) drain off liquids and (b) dissipate heat.

36. (Previously Presented) The compact drive according to claim 35, wherein the peaks and depressions include at least one of (a) grooves and (b) corrugations.

37. (Previously Presented) The compact drive according to claim 36, wherein a resistance to heat transfer from the corrugations to ambient air is less than a resistance to heat transfer from a planar region of the housing to ambient air.

38. (Previously Presented) The compact drive according to claim 34, wherein a resistance to heat transfer from power electronics of the electronic circuit through a corrugated region of a housing of the compact drive to ambient air is less than a resistance to heat transfer from the power electronics through a planar region of the housing to ambient air.

39. (Previously Presented) A compact drive, comprising:
a housing including at least two housing parts and at least one housing cover;
an electric motor arranged in the housing and having a rotor shaft supported by bearings arranged in at least one of the housing parts;
a transmission arranged in the housing and including an output shaft and at least one intermediate shaft, the output shaft supported by bearings arranged in the at least one housing part in which the bearings supporting the rotor shaft are arranged;
a frequency converter; and

wherein:

the output shaft of the transmission, the at least one intermediate shaft of the transmission and the rotor shaft of the electric motor are arranged in parallel, a shaft-center distance determined in accordance with at least one transmission stage;

the frequency converter is arranged laterally in a direction orthogonal with respect to the rotor shaft; and

the two sides of the output shaft are accessible to provide a two-sided power take-off.

40. (Canceled)

REMARKS

I. Introduction

With the cancellation herein without prejudice of claim 40, claims 18 to 22, 24 to 30 and 32 to 39 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

II. Allowed Claims

Applicants note with appreciation the indication that claims 18 to 22, 24 to 30, and 32 to 39 have been allowed.

III. Rejection of Claim 40 Under 35 U.S.C. § 103(a)

Claim 40 was rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of European Published Patent Application No. 1 231 701 ("Ohnuma") in view of U.S. Patent No. 5,950,797 ("Aulanko"). While Applicant does not agree with the merits of this rejection, to facilitate matters, claim 40 has been cancelled by this amendment without prejudice to prosecution of the subject matter in a separate application. It is therefore respectfully submitted that the present rejection is moot, and withdrawal of this rejection is respectfully requested.

IV. Conclusion

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

Date: September 17, 2008

By:  /
Clifford A. Ulrich
Reg. No. 42,194

KENYON & KENYON LLP
One Broadway
New York, New York 10004
(212) 425-7200
CUSTOMER NO. 26646